

Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	NanoChemonics Holdings, LLC
Facility Name:	NanoChemonics Holdings, LLC
Facility Location:	4 Magnox Drive Pulaski, Virginia
Registration Number:	20322
Permit Number:	WCRO-20322

Effective Date

Expiration Date

Regional Director

Signature Date

Table of Contents, 2 pages
Permit Conditions, 39 pages

Table of Contents

I. FACILITY INFORMATION.....	4
II. EMISSION UNITS	7
III. FUEL BURNING EQUIPMENT REQUIREMENTS – EMISSION UNIT IDS EU-C6, 10 AND 15 (3 BOILERS).....	9
A. LIMITATIONS	9
B. MONITORING AND RECORDKEEPING	10
C. TESTING	11
D. MONITORING AND RECORDKEEPING	11
IV. PROCESS EQUIPMENT REQUIREMENTS – EMISSION UNIT ID EU-K: KILNS, CALCINERS.....	12
A. LIMITATIONS	12
B. MONITORING.....	13
C. RECORDKEEPING	13
D. TESTING	14
E. MONITORING AND RECORDKEEPING	14
V. PROCESS EQUIPMENT REQUIREMENTS – EMISSION UNIT ID EU-CRK: CONTINUOUS REDUCTION KILN/CALCINER	15
A. LIMITATIONS	15
B. MONITORING.....	16
C. RECORDKEEPING	16
D. TESTING	17
E. MONITORING AND RECORDKEEPING	17
VI. PROCESS EQUIPMENT REQUIREMENTS – EMISSION UNIT ID EU-D: DRYERS	18
A. LIMITATIONS	18
B. MONITORING.....	19
C. RECORDKEEPING	20
D. TESTING	20
E. MONITORING AND RECORDKEEPING	21
VII. FACILITY WIDE CONDITIONS.....	22
A. MONITORING.....	22
VIII. INSIGNIFICANT EMISSION UNITS.....	22
IX. COMPLIANCE PLAN.....	28
X. PERMIT SHIELD & INAPPLICABLE REQUIREMENTS	29
XI. GENERAL CONDITIONS.....	30

A.	FEDERAL ENFORCEABILITY	30
B.	PERMIT EXPIRATION.....	30
C.	RECORDKEEPING AND REPORTING	31
D.	ANNUAL COMPLIANCE CERTIFICATION	32
E.	PERMIT DEVIATION REPORTING	33
F.	FAILURE/MALFUNCTION REPORTING	33
G.	SEVERABILITY	34
H.	DUTY TO COMPLY	34
I.	NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE	34
J.	PERMIT MODIFICATION	34
K.	PROPERTY RIGHTS.....	34
L.	DUTY TO SUBMIT INFORMATION	35
M.	DUTY TO PAY PERMIT FEES	35
N.	FUGITIVE DUST EMISSION STANDARDS	35
O.	STARTUP, SHUTDOWN, AND MALFUNCTION	36
P.	ALTERNATIVE OPERATING SCENARIOS	36
Q.	INSPECTION AND ENTRY REQUIREMENTS	36
R.	REOPENING FOR CAUSE	37
S.	PERMIT AVAILABILITY	37
T.	TRANSFER OF PERMITS.....	37
U.	MALFUNCTION AS AN AFFIRMATIVE DEFENSE	38
V.	PERMIT REVOCATION OR TERMINATION FOR CAUSE.....	39
W.	DUTY TO SUPPLEMENT OR CORRECT APPLICATION.....	39
X.	STRATOSPHERIC OZONE PROTECTION	39
Y.	ASBESTOS REQUIREMENTS	39
Z.	ACCIDENTAL RELEASE PREVENTION.....	40
AA.	CHANGES TO PERMITS FOR EMISSIONS TRADING	40
BB.	EMISSIONS TRADING	40
XII.	STATE-ONLY ENFORCEABLE REQUIREMENTS.....	41

I. Facility Information

Permittee

NanoChemonics Holdings, LLC
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Pulaski, VA 24301

Responsible Official

Carmine A. DeNitto
Vice President

Facility

NanoChemonics Holdings, LLC
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Contact Person

Rhendal Butler
Quality/Environmental Manager
(540) 980-9412

County-Plant Identification Number: 155-0011

Facility Description: NAICS code 325131 – The facility is a Title V major source of carbon monoxide. This source is located in an attainment area for all pollutants, and is not subject to PSD, NSPS, MACT or NESHAP requirements, including the Magnetic Tape NESHAP.

This manufacturing plant produces magnetic iron oxide pigment powders for recording and printing applications. In simplified form, the process consists of (a) aqueous digesting of iron or steel and aqueous metal (such as cobalt) adsorption, all without air emissions, (b) iron oxide powder/dust drying, granulating and material handling, (c) high temperature gas phase oxidation-reduction reactions of iron oxide dust/powder in a group of 22 small batch kilns/calciners, (d) additional high temperature reduction of a portion of the material in a continuous reduction kiln/calciner, (e) annealing with minimal emissions after fabric filtering, and (f) powder/dust mulling, miscellaneous processing, material handling and storage, and bagging.

The high temperature reduction reactions in the kilns/calciners include the use of carbon monoxide (CO) in the reducing gas atmosphere and results in CO emissions exceeding 100 tons/yr due to venting the unreacted portion of the gas. This quantity of CO emission is the reason for this plant needing a Title V operating permit, even though annual permit fees are not applied to CO emissions. The process emission, other than from kilns/calciners, is particulate matter (dust/powder) from a multitude of processing points inside buildings, including several dryers, and is all well controlled by several baghouse/ fabric filter dust collectors and a few

scrubbers. There are also 3 boilers totaling 69.1 million Btu/hr input capacity fired with natural gas and standby No. 2 fuel oil. Additional plant fuel burning is natural gas, but each additional unit is small enough to be exempt from regulations (below 10 million Btu/hr).

The emissions units are grouped as follows:

EU-C Emission Units - Combustion (3 natural gas/No. 2 fuel oil boilers)

EU-K Emission Units - Kilns/calciners (22 batch units)

EU-CRK Emission Unit - Continuous Reduction Kiln/calcliner (#244)

EU-D Emission Units - Dryers (Combined total of all dust emitting processes other than kilns/calciners, including many dryers, annealers, mullers, miscellaneous powder processing, material handling, storage, and bagging)

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment							
EU-C-6, 10, 15	6S, 10S, 15S	Combustion units, 3 boilers combined, each burning natural gas with No. 2 fuel oil backup: EU-C-6, 32.00 million Btu/hr, No. 3 Murray 10207 boiler; EU-C-10, 21.76 million Btu/hr, No. 2 Com B-7308 boiler; EU-C-15, 15.36 million Btu/hr, No.1 Springfield HS 1352 boiler.	69.1 million Btu/hr input rated capacity, 3 boilers combined.	None	NA	NA	None - each boiler was installed before 1972.
Process EU-K: Kilns, Calciners							
EU-K-149, 152, 154, 155, 157, 164, 166, 168, 171, 173, 176, 178, 181, 183, 186,	149, 152, 154, 155, 157, 164, 166, 168, 171, 173, 176, 178, 181, 183, 186, 187, 190, 191, 194, 196, 199, 201, 204, 206,	22 batch kilns/calciners	22 batch calciners, 0.1 tph each, 17,280 tpy combined	Dust collectors	DCM-01 through 24; DCM-31; DCY-05	PM	May 7, 1998

187, 190, 191, 194, 196, 199, 201, 204, 206, 244, 275	244, 275						
Process EU-CRK: Continuous Reduction Kiln/Calciner							
EU-CRK-244	244S	Continuous Reduction kiln/calciner, ABB Raymond	Continuous reducer, 0.33 tph, 2891 tpy.	Dust collector	DCM-31	PM	May 6, 1998
Process EU-D: Dryers, material handling, etc. – all dust-emitting processes other than kilns/calciners							
EU-D-23, 33, 77, 86, 91, 93, 94, 224, 247, 256, 265	23, 33, 77, 86, 91, 93, 94, 224, 247, 256, 265	Combined total of all dust emitting processes other than kilns/calciners, including four rotary dryers, one belt dryer, one magnetite dryer, SP dryer #7, cobalt adsorption plant dryer, one annealer, four mullers, four packers, four ballmills, and miscellaneous processing, material handling and storage equipment	NA	Dust collectors	DCY-01 through DCY-06; DCM-33	PM	May 7, 1998, June 18, 1993, June 26, 1992

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

III. Fuel Burning Equipment Requirements – Emission unit IDs EU-C6, 10 and 15 (3 boilers)

A. Limitations

1. Particulate emissions and SO₂ emissions from the boilers shall be controlled by limiting the fuels to natural gas and No. 2 fuel oil.
(9 VAC 5-80-110)
2. The approved fuels for the boilers are natural gas and distillate oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396-78 “Standard Specification for Fuel Oils.” A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-110)

3. Emissions from the operation of the boilers shall not exceed the limits specified below:

Total Suspended Particulate	0.36* lbs/million BTU input
PM-10	0.36* lbs/million BTU input
Sulfur Dioxide	2.64* lbs/million BTU input hourly emission limit

* Particulate and SO₂ emission limits are effectively much cleaner than these values due to another condition for these boilers limiting the fuel to natural gas and No. 2 fuel oil. The No. 2 fuel oil definition limits maximum sulfur content to 0.5wt%, which calculates to only approximately 0.02 lb particulate/million Btu and approximately 0.52 lb SO₂/million Btu when using AP-42 emission factors.
(9 VAC 5-80-110, 9 VAC 5-40-900 A.1.b. and 9 VAC 5-40-930 A.1)

4. Visible emissions from each of the boiler stacks shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity.
(9 VAC 5-40-940 B and 9 VAC 5-80-110)
5. Boiler emissions shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.
(9 VAC 5-80-110)

B. Monitoring and Recordkeeping

1. Operation & Maintenance Procedures - The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to the boilers:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance for the boilers.
 - b. Develop an inspection schedule, monthly at a minimum, to insure operational integrity of the boilers, and maintain records of inspection results.
 - c. Have available written operating procedures for the boilers. These procedures shall be based on the manufacturer's recommendations, at a minimum, if such recommendations exist.
 - d. Train operators in the proper operation of the boilers and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request. (9 VAC 5-40-20E and 9 VAC 5-80-110 F & K)

2. Distillate oil: The permittee shall obtain a certification, or alternative statement, from the fuel supplier covering each shipment of distillate oil. Each fuel supplier certification or alternative statement shall include the following:
 - a. The name of the fuel supplier,
 - b. The date on which the oil was received,
 - c. The volume of distillate oil delivered in the shipment,
 - d. A statement that the oil complies with the American Society for Testing and Materials (ASTM) specifications for fuel oil numbers 1 and 2, and
 - e. The sulfur content of the oil.

(9 VAC 5-80-110)

3. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of

such records shall be arranged with the Air Compliance Manager, West Central Regional Office. These records shall include, but are not limited to:

- a. The daily and annual throughput of natural gas (in million cubic feet) and distillate oil (in 1000 gallons) for the boilers. The annual throughput shall be calculated monthly as the sum of each consecutive twelve (12) month period.
- b. All fuel supplier certifications, or alternative statements.
- c. The sulfur content of the oil burned in these boilers.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-80-110)

4. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boilers. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.
(9 VAC 5-80-110)

C. Testing

1. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-40-30 and 9 VAC 5-80-110)

D. Monitoring and Recordkeeping

1. See XI C., D., E. and F. for facility-wide reporting requirements.
(9 VAC 5-50-50 and 9 VAC 5-80-110)

IV. Process Equipment Requirements – Emission unit ID EU-K: Kilns, Calciners

A. Limitations

1. Particulate emissions from the kilns/calciners shall be controlled by baghouses/fabric filters or equivalent. The control devices shall be provided with adequate access for inspection.
(9 VAC 5-50-260, 9 VAC 5-80-110 and Conditions 4 and 5 of 5/7/1998 Permit)
2. The annual production of calcined iron oxide from the K3 – K24 group of kilns/calciners, shall not exceed 17,280 tons/year, calculated monthly as the sum of each consecutive twelve (12) month period.
(9 VAC 5-80-110, Condition 6 of 6/26/1992 Permit and Condition 8 of 5/7/1998 Permit)
3. The monthly production of calcined iron oxide from the K3 – K24 group of kilns/calciners, shall not exceed 1,637 tons/month.
(9 VAC 5-80-110)

4. Emissions from the operation of the K3 – K24 group of kilns/calciners shall not exceed the limits specified below:

Total Suspended Particulate	0.081 lbs/hr	0.354 tons/yr
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PM-10	0.081 lbs/hr	0.354 tons/yr
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Carbon Monoxide	102.3 lbs/hr	448.0 tons/yr
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(9 VAC 5-80-110, proportional to Condition 11 of 5/7/1998 Permit based on 9 VAC 5-50-260)

5. Visible emissions from the K3 – K24 group of kilns/calciners shall not exceed 5 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.
(9 VAC 5-50-260, 9 VAC 5-80-110 and Condition 13 of 5/7/1998 Permit)
6. Operation & Maintenance Procedures – The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

- b. Develop an inspection schedule, monthly at a minimum, to insure the operational integrity of the air pollution control equipment and maintain records of inspection results.
- c. Have available written operating procedures for the air pollution control equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum, and shall list the range of pressure drop across each baghouse/fabric filter consistent with proper control device operation.
- d. Train operators in the proper operation of all air pollution control equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.
- e. Maintain an inventory of spare parts that are needed to maintain the air pollution control equipment in proper working order.

Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request. (9 VAC 5-50-20E, 9 VAC 5-80-110 F & K and Condition 20 of 5/7/1998 Permit)

B. Monitoring

- 1. Baghouses/Fabric Filters: Each baghouse shall be equipped with a device to continuously measure the differential pressure drop across the baghouse/fabric filters. Each device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times.
(9 VAC 5-80-110 and Condition 4 of 5/7/1998 Permit)

C. Recordkeeping

- 1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Air Compliance Manager, West Central Regional Office. These records shall include, but are not limited to:
 - a. Annual and monthly production of calcined iron oxide, calculated monthly as the sum of each consecutive twelve (12) month period.
 - b. Annual and monthly estimated emissions of Total Suspended Particulate, PM-10 and CO, calculated monthly as the sum of each consecutive twelve (12) month period. The emission factors, control efficiencies, and emission calculation equations used in these emission calculations shall be identified and readily available.

- c. Log entries, at least weekly, of control device monitoring data required by this permit, such as measured values of pressure drop across each baghouse/fabric filter.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110, Condition 12 of 6/26/1992 Permit and Condition 17 of 5/7/1998 Permit)

D. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30, 9 VAC 5-80-110 and Condition 7 of 5/7/1998 Permit)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-50-30, 9 VAC 5-80-110 and Condition 7 of 5/7/1998 Permit)

E. Monitoring and Recordkeeping

1. See XI C., D., E. and F. for facility-wide reporting requirements.
(9 VAC 5-50-50 and 9 VAC 5-80-110)

**V. Process Equipment Requirements – Emission unit ID EU-CRK:
Continuous Reduction Kiln/Calciner**

A. Limitations

1. Particulate emissions from the continuous reduction kiln/calciner shall be controlled by a baghouse having a minimum control efficiency of 99.0%. The control device shall be provided with adequate access for inspection.
(9 VAC 5-50-260, 9 VAC 5-80-110 and Condition 3 of 5/6/1998 Permit)
2. The annual production of ferric oxide (Fe_2O_3) from the continuous reduction kiln/calciner shall not exceed 2891 tons/year, calculated monthly as the sum of each consecutive twelve (12) month period.
(9 VAC 5-80-110 and Condition 5 of 5/6/1998 Permit)
3. The monthly production of ferric oxide (Fe_2O_3) from the continuous reduction kiln/calciner shall not exceed 246 tons/month.
(9 VAC 5-80-110)
4. Emissions from the operation of the continuous reduction kiln/calciner shall not exceed the limits specified below:

Carbon Monoxide	8.45 lbs/hr	37.0 tons/yr	(9 VAC 5-50-260)
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(9 VAC 5-80-110 and Condition 8 of 5/6/1998 Permit)
5. Visible emissions from the continuous reduction kiln/calciner shall not exceed 5 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.
(9 VAC 5-50-260, 9 VAC 5-80-110 and Condition 9 of 5/6/1998 Permit)
6. Operation & Maintenance Procedures – The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
 - b. Develop an inspection schedule, monthly at a minimum, to insure the operational integrity of the air pollution control equipment and maintain records of inspection results.
 - c. Have available written operating procedures for the air pollution control equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

- d. Train operators in the proper operation of all air pollution control equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.
- e. Maintain an inventory of spare parts that are needed to maintain the air pollution control equipment in proper working order.

Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request. (9 VAC 5-50-20E, 9 VAC 5-50-260, 9 VAC 5-80-110 and Conditions 15 and 16 of 5/6/1998 Permit)

B. Monitoring

- 1. The baghouse shall be equipped with a device to continuously measure the differential pressure drop across the baghouse. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times.
(9 VAC 5-80-110 and Condition 3 of 5/6/1998 Permit)

C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Air Compliance Manager, West Central Regional Office. These records shall include, but are not limited to:

- a. Annual and monthly production of ferric oxide (Fe_2O_3) from the continuous reduction kiln/calcliner, calculated monthly as the sum of each consecutive twelve (12) month period.
- b. Annual and monthly emissions of CO from the continuous reduction kiln/calcliner, calculated monthly as the sum of each consecutive twelve (12) month period. The emission factors, control efficiencies, and emission calculation equations used in these emission calculations shall be identified and readily available.
- c. Log entries, at least weekly, of control device monitoring data required by this permit, such as measured values of pressure drop across the baghouse.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-50-50, 9 VAC 5-80-110 and Condition 11 of 5/6/1998 Permit)

D. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30, 9 VAC 5-80-110 and Condition 4 of 5/6/1998 Permit)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-50-30 and 9 VAC 5-80-110)

E. Monitoring and Recordkeeping

1. See XI C., D., E. and F. for facility-wide reporting requirements.
(9 VAC 5-50-50 and 9 VAC 5-80-110)

VI. Process Equipment Requirements – Emission unit ID EU-D: Dryers

A. Limitations

1. Particulate emissions from the dryers and all other non-kiln/calcliner dust processing equipment with dust emissions shall be controlled by fabric filters or equivalent, such as certain scrubbers. The control devices shall be provided with adequate access for inspection.
(9 VAC 5-50-260, 9 VAC 5-80-110, Condition 3 of 6/26/1992 Permit, Condition 3 of 6/18/1993 Permit and Condition 3 of 5/7/1998 Permit)
2. Particulate and cobalt emissions from the multi-purpose dryer, DR-8, shall be controlled by a baghouse having a minimum control efficiency of 99.0%.
(9 VAC 5-50-260, 9 VAC 5-80-110 and Condition 3 of 6/18/1993 Permit)
3. The approved fuel for any of the non-kiln/calcliner dust processing equipment is natural gas. A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-110)
4. The annual production of calcined iron oxide from the overall facility, which means from the K3 – K24 group of kilns/calcliners, shall not exceed 17,280 tons/year, calculated monthly as the sum of each consecutive twelve (12) month period.
(9 VAC 5-80-110, Condition 6 of 6/26/1992 Permit and Condition 8 of 5/7/1998 Permit)
5. The monthly production of calcined iron oxide from the overall facility, which means from the K3 – K24 group of kilns/calcliners, shall not exceed 1,637 tons/month.
(9 VAC 5-80-110, Condition 6 of 6/26/1992 Permit and Condition 8 of 5/7/1998 Permit)
6. The annual throughput of the multi-purpose dryer, DR-8, shall not exceed 4380 tons/yr, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition 4 of 6/18/1993 Permit)
7. The monthly throughput of the multi-purpose dryer, DR-8, shall not exceed 372 tons/month.
(9 VAC 5-80-110)
8. The cobalt adsorption process shall consume no more than 76 pounds of cobalt per ton of finished product.
(9 VAC 5-80-110 and Condition 7 of 6/26/1992 Permit)

9. Visible emissions from the non-kiln/calcliner dust processing equipment shall not exceed 5 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.
(9 VAC 5-50-260, 9 VAC 5-80-110, Condition 10 of 6/26/1992 Permit, Condition 5 of 6/18/1993 Permit and Condition 12 of 5/7/1998 Permit)
10. Operation & Maintenance Procedures – The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
 - b. Develop an inspection schedule, monthly at a minimum, to insure the operational integrity of the air pollution control equipment and maintain records of inspection results.
 - c. Have available written operating procedures for the air pollution control equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
 - d. Train operators in the proper operation of all air pollution control equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.
 - e. Maintain an inventory of spare parts that are needed to maintain the air pollution control equipment in proper working order.

Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request.
(9 VAC 5-50-20E, 9 VAC 5-50-260, 9 VAC 5-80-110 and Conditions 15 and 16 of 5/6/1998 Permit)

B. Monitoring

1. Each fabric filter shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter, or alternate instrumentation as agreed upon by the Air Compliance Manager, West Central Regional Office. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times.
(9 VAC 5-80-110 and Condition 4 of 5/7/1998 Permit)
2. Each scrubber shall be equipped with a flow meter to continuously measure the liquid flow to the scrubber, or alternate instrumentation as agreed upon by the Air

Compliance Manager, West Central Regional Office. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times.

(9 VAC 5-80-110)

C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Air Compliance Manager, West Central Regional Office. These records shall include, but are not limited to:

- a. Annual and monthly production of calcined iron oxide from the overall facility, calculated monthly as the sum of each consecutive twelve (12) month period.
- b. The yearly and monthly production of the multi-purpose dryer, DR-8, calculated monthly as the sum of each consecutive 12 month period.
- c. The yearly and monthly pounds of cobalt consumption per ton of finished product, calculated monthly as the sum of each consecutive 12 month period.
- d. Log entries at least weekly (weekly log) of the control device monitoring data required by this permit for the non-kiln/calcliner dust processing equipment, such as measured values of pressure drop across fabric filters.
- e. Log entries at least weekly (weekly log) of the visible emissions monitoring results required by the Monitoring section under Facility Wide Conditions below.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-40-50, 9 VAC 5-50-50, 9 VAC 5-80-110, Condition 12 of 6/26/1992 Permit, Condition 7 of 6/18/1993 Permit, Condition 11 of 5/6/1998 Permit and Condition 17 of 5/7/1998 Permit)

D. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30, 9 VAC 5-80-110 and Condition 2 of 6/26/1992 Permit)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-50-30 and 9 VAC 5-80-110)

E. Monitoring and Recordkeeping

1. See XI C., D., E. and F. for facility-wide reporting requirements.
(9 VAC 5-50-50 and 9 VAC 5-80-110)

VII. Facility Wide Conditions

A. Monitoring

1. Visible Emissions: - Each emissions unit with a visible emissions requirement in this permit shall be observed visually at least once each calendar week in which the emissions unit operates. The visual observations shall be conducted using 40 CFR 60 Appendix A Method 22 techniques (condensed water vapor/steam is not a visible emission) for at least a brief time to only identify the presence of visible emissions. Each emissions unit in the Method 22 technique observation having visible emissions shall be evaluated by conducting a 40 CFR 60 Appendix A Method 9 visible emissions evaluation (VEE) for at least six (6) minutes, unless corrective action is taken that achieves no visible emissions. 40 CFR 60 Appendix A Method 9 requires the observer to have a Method 9 certification that is current at the time of the VEE. If any of these six (6) minute VEE averages exceed the unit's opacity limitation, a VEE shall be conducted on these emissions for at least three (3) six-minute periods (at least 18 minutes). All visible emission observations, VEE results, and corrective actions taken shall be recorded.
 (9 VAC 5-80-110 E)

VIII. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
N/A	Ferrous Sulfate Dissolving Tank		yes, PM	
N/A	Copperas Sludge Recovery Tanks (2)		yes	
N/A	NTR - Lab Hood		yes, PM	
N/A	Starter Storage Tanks (3)		yes	
N/A	Conversion - A&B Floc Tanks		yes	
N/A	#4 Conversion Storage Tank		yes	
N/A	Cobalt Zinc Mix Tanks (2)		yes, Cobalt, Zinc, PM	

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
N/A	Iron Oxide Storage Tanks (40)		yes, PM	
N/A	CA Plant - 5A Copperas Head Tank		yes	
N/A	CA Plant - 10a Waste Caustic Storage Tank		yes	
N/A	CA Plant - TK7 Cobalt Mix Tank		yes, Cobalt	
N/A	CA Plant - TK13 Reslurry Tank		yes	
N/A	CA Plant - #14 Reagent Mix Tank		yes	
N/A	CA Plant - 14a Cobalt Mix Tank		yes, Cobalt	
N/A	CA Plant - Filtration Tank		yes	
N/A	CA Plant - Product Storage Hoppers		yes, PM	
N/A	CA Plant - Conversion Tank		yes	
N/A	CA Plant - Blender		yes	
N/A	CA Plant - Reuse Caustic 5% Storage Tank		yes	
N/A	CA Plant - 50% Caustic Storage Tank		yes	
N/A	25,000 gallon fuel oil tank		yes	
N/A	Pilot Plant - TK 30		yes	
N/A	Pilot Plant – NTR stack		yes	
N/A	Pilot Plant - Misc. Storage Tanks (9)		yes	
N/A	Pilot Plant - Filter Presses (6)		yes, PM	
N/A	Rotary Dryer Area - Rotary Filters (3)		yes, PM	
N/A	Manufacturing - Filter Presses (2)		yes, PM	
N/A	Packaging		yes, PM	
N/A	R & D - #1 Kiln Hood Exhaust		yes, PM	

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
N/A	R & D - #1 Kiln Exhaust		yes, PM	
N/A	R & D - #2 Kiln Hood Exhaust		yes, PM	
N/A	R & D - #2 Kiln Exhaust		yes, CO, PM	
N/A	R & D - Flexible Fume Hood - oven room		yes, PM	
N/A	R & D - High Temp. Oven/Kiln Room		yes, CO, PM	
2	W. T. Lime Storage Tank Dust Collector		yes	
3	Creek Water Pump House		yes	
4	Creek Water Pump House		yes	
5	Boiler House Natural Gas Heater			<10mmBTU
21	Nat. Gas Heater - Y.O. Shop			<10mmBTU
25	#38 Copperas Storage Tank Vent		yes	
26	#39 Caustic Storage Tank Vent		yes	
27	Nat. Gas Heater S.P.			<10mmBTU
28	Nat. Gas Heater S.P.			<10mmBTU
29	Nat. Gas Heater S.P.			<10mmBTU
33	S.P. Dryer Burner Exhaust			<10mmBTU
35	D Reactor Exhaust Stack		yes	
36	#45 Copperas Storage Tank Vent		yes	
37	E Reactor Exhaust Stack		yes	
40	#13 Copperas Storage Tank Vent		yes	
41	#12 Copperas Storage Tank Vent		yes	
42	#11 Copperas Storage Tank Vent		yes	

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
43	#6 Copperas Cook Tank Stack		yes	
47	#8 Copperas Cook Tank		yes	
49	#1 Copperas Cook Tank		yes	
75	Rotarty Dryer Deaerator Tank Vent		yes	
79	Black Dust Collector Stack		yes	
92	#6 Belt Dryer Heat Exchanger Stack		yes	
100	#30 Tank Ducon Scrubber Stack		yes	
102	#4 Proctor Dryer Exhaust Stack		yes	
104	#1 & #2 Proctor Dryer Exhaust Stack		yes	
106	#1-2-3 Nat. Gas Hot Water Heater Stack			<10mmBTU
107	#4-5-6 Nat. Gas Hot Water Heater Stack			<10mmBTU
113	Flammable Storage Cabinet Vent		yes	
120	Fume Hood Exhaust Conversion		yes	
121	Exhaust Fan Fume Hood Kiln Room		yes	
122	#1 Dev. Kiln Hood Exhaust		yes	
123	#1 Dev. Kiln Exhaust		yes	
124	#2 Dev. Kiln Hood Exhaust		yes	
125	#2 Dev. Kiln Exhaust		yes	
127	Flexible Fume Hood - Oven Room		yes	
128	High Temp. Oven Kiln Room - Dev.		yes	
141	Nat. Gas Heater - M.O. Shop			<10mmBTU
143	Nat. Gas Heater - Forklift Shop			<10mmBTU

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
145	Nat. Gas Hot Water Heater - M.O. Shop			<10mmBTU
150	Nat. Gas High Press. Hot Water Heater			<10mmBTU
151	#24 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
153	#23 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
156	#22 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
158	#21 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
163	Batch Kiln #1 - R & D		yes	
165	#4 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
169	#3 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
170	#6 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
174	#5 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
175	#8 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
179	#7 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
180	#16 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
184	#15 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
185	#18 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
188	#17 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
189	#19 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
192	#20 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
193	#13 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
197	#14 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
198	#11 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
202	#12 Kiln Hood Exhaust, Nat. Gas			<10mmBTU

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
203	#9 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
207	#10 Kiln Hood Exhaust, Nat. Gas			<10mmBTU
214	Nat. Gas Hot Water Heaters Stack - 4 ea.			<10mmBTU
215	Air Inlet Control Rm. Hot Water Heater, Nat. Gas			<10mmBTU
216	Nat. Gas Hot Water Boiler			<10mmBTU
229	Nat. Gas Heater - M. O. Drum Storage			<10mmBTU
230	Nat. Gas Heater Air Intake - Blenders			<10mmBTU
232	Nat. Gas Heater - Warehouse			<10mmBTU
233	Nat. Gas Heater - Warehouse			<10mmBTU
242	High Temp. Kiln Burner Exhaust, Nat. Gas			2.4mm BTU
248	5% Caustic Exhaust W.T. Inside Pit		yes	
252	Nat. Gas Heater Y.O. Shop Storage Area			<10mmBTU
257	C.A. Plant - #14 Mix Tank		yes	
260	C.A. Plant - #8-A Storage Tank		yes	
262	50% Caustic Storage Tank - C.A. Plant		yes	
264	Reuse Caustic 5% Storage Tank- C.A. Plant		yes	
266	High Temp. Kiln Burner Exhaust- Feed End, Nat. Gas			2.4mmBTU
269	High Temp. Kiln Burner Exhaust- Center, Nat. Gas			2.4mmBTU

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
31A	A Reactor Exhaust		yes	
32A	B Reactor Exhaust		yes	
34A	C Reactor Exhaust Stack		yes	
61A	#2 NTR Tank Stack		yes	
62A	#3 NTR Tank Stack		yes	
70A	#1 NTR Tank Stack		yes	
71A	#4 NTR Tank Stack		yes	
73A	#5 NTR Tank Stack		yes	
74A	#6 NTR Tank Stack		yes	
116A	#8 Conversion Tank Stack		yes	
258A	C.A. Plant - 36-B Process Tank		yes	
259A	C.A. Plant - #6-A Process Tank		yes	

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

IX. Compliance Plan

Not applicable.

X. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
None	None	None

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

XI. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the effective date of this permit. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9 VAC 5-80-110 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **September 1** and **March 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
 - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:

- (1) Exceedance of emission limitations or operational restrictions;
 - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
 - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”
- d. The report shall be sent to the following address:

Air Compliance Manager
VA DEQ
3019 Peters Creek Road
Roanoke, VA 24019

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and to DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. The identification of each term or condition of the permit that is the basis of the certification.
3. The compliance status.
4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.

5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
6. Such other facts as the permit may require to determine the compliance status of the source.
7. This annual compliance certification shall be sent to the following addresses:

Air Compliance Manager
VA DEQ
3019 Peters Creek Road
Roanoke, VA 24019

U. S. Environmental Protection Agency, Region III
Clean Air Act Title V Compliance Certification (3AP00)
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Air Compliance Manager, West Central Regional Office, within four (4) daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition IX.C.3 of this permit.
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Air Compliance Manager, West Central Regional Office, by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring

requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Air Compliance Manager, West Central Regional Office.
(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)
2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9 VAC 5-40-20 E and 9 VAC 5-50-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.
(9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.

(9 VAC 5-80-160)

2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)
3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in the permit.
 - d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirement of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirements under 9 VAC 5-20-180 C.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.

4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-190 C and 9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

AA. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-110 I)

BB. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

XII. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

1. OdorNA
2. State toxics ruleNA
3. OtherNA

(9 VAC 5-80-110 N and 9 VAC 5-80-300)